

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/040092

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C10G67/08 C10G67/14 C10G21/08 C10G47/00 C10G17/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C10G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 800 427 A (JR. WILLIAM A. JUNK, ET AL) 23 July 1957 (1957-07-23) column 1, line 46 - line 49 column 3, line 7 - line 15 column 6, line 17 column 9, line 69 - line 71; claims 1,6	1-3,5, 8-18, 20-22
X	US 2 902 430 A (JR. CHARLES NEWTON KIMBERLIN, ET AL) 1 September 1959 (1959-09-01) column 1, line 24 - line 56 column 4, line 59 - line 73 column 7, line 1 - line 32; claim 1; figure 1 ----- -/--	1-4,6, 8-18, 20-22

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

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O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

21 February 2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 5 730 858 A (OLIVIER ET AL) 24 March 1998 (1998-03-24) column 2, line 15 - line 23 column 8, line 30 - line 36; claim 1; example 1; table 1 -----	1-5, 7-22
X	US 3 749 666 A (LOCKWOOD W, US ET AL) 31 July 1973 (1973-07-31) column 2, line 20 - line 54; claim 1; example 1; tables 1-3 -----	1, 2, 8-13, 17-22
X	US 3 681 233 A (IVOR W. MILLS ET AL) 1 August 1972 (1972-08-01) column 3, line 62 - line 68 column 5, line 20 - line 30 column 6, line 43 - line 55; claims 1, 4; table 1 -----	1-4, 8-18, 20-22
A	US 3 992 156 A (CLONTS ET AL) 16 November 1976 (1976-11-16) cited in the application the whole document -----	1-22

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Information on patent family members

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